

WE CLAIM AS OUR INVENTION

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PATENT CLAIMS

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1. Broadband communication system comprising a plurality of cordless communication devices (1) connected to one another for cordless communication with at least one communication terminal (2) within a communication cell, whereby the cordless communication devices (1) are connectible to a power supply network and are fashioned for broadband data transmission via the power supply network (4).

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2. Communication system according to claim 1, characterized in that the cordless communication devices (1) are fashioned for cordless data transmission via radio.

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3. Communication system according to claim 1, characterized in that the cordless communication devices (1) are fashioned for cordless data transmission via infrared radiation.

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4. Communication system according to claim 3, characterized in that the data transmission between cordless communication device (1) and communication terminal (2) ensues with amplitude modulation of the infrared base band.

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5. Communication system according to claim 3, characterized in that the data transmission between cordless communication device (1) and communication terminal (2) ensues by higher-grade, digital modulation.

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6. Communication system according to one of the claims 3 through 5, characterized in that the infrared radiation has a wavelength from 800 nm through 100 nm.

7. Communication system according to one of the claims 3 through 5, characterized in that the infrared radiation has a wavelength from 1200 nm through 1400 nm.

8. Communication system according to one of the claims 3 through 7, characterized in that the infrared source is a surface-emitting semiconductor laser (VCSEL).

9. Communication system according to one of the claims 1 through 8, 5 characterized by a control means (5) for controlling the data communication between the cordless communication devices (1).

10. Communication system according to claim 9, characterized in that the control means (5) produces a connection to an external communication network.

11. Communication system according to claim 10, characterized in 10 that the connection to the external communication network is produced with coaxial cable or optical fiber cable.

12. Communication system according to claim 10, characterized in that the connection to the external communication network ensues via a radio connection.

15 13. Communication system according to one of the claims 1 through 12, characterized in that the cordless communication devices (1) are fashioned for data transmission via a 230 volt or a 110 volt power supply network.

14. Communication system according to one of the claims 1 through 13 characterized in that a communication cell is formed by a room in a building.

20 15. Communication system according to one of the claims 1 through 14, characterized in that the cordless communication devices (1) can be screwed into an incandescent bulb socket.

16. Communication system according to claim 15, characterized in that a cordless communication device comprises its own incandescent bulb socket

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